

Martinez Refinery Renewable Fuels Project (County File CDLP20-02026)

CONTRA COSTA COUNTY DEPARTMENT OF CONSERVATION AND DEVELOPMENT JOSEPH W. LAWLOR JR, AICP, PROJECT PLANNER CONTACT: JOSEPH.LAWLOR@DCD.CCOUNTY.US, 925-655-2872

Today's Presentation



PROJECT BACKGROUND



PROJECT OVERVIEW



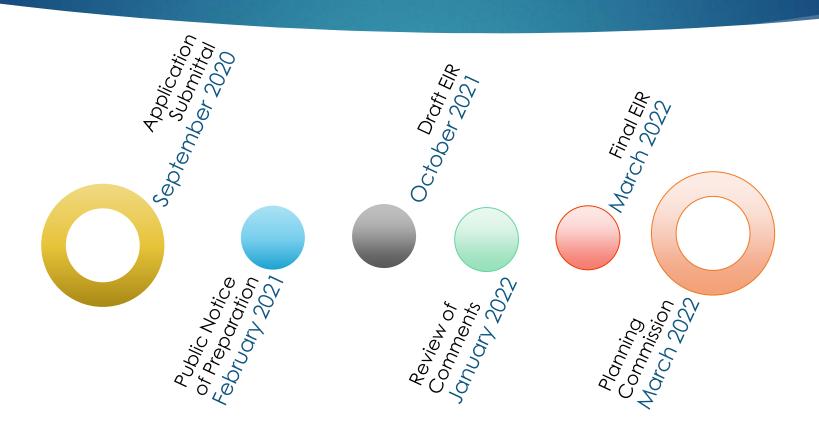
ENVIRONMENTAL IMPACT REPORT



STAFF RECOMMENDATION

Background

Review Timeline



Submittal

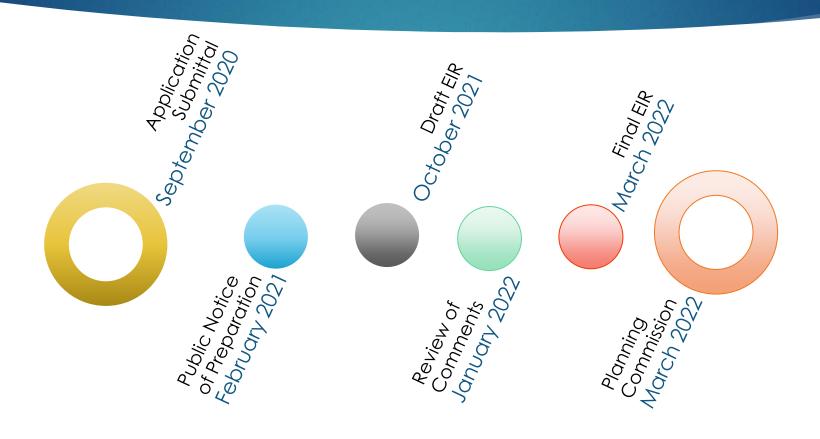


Tesoro Refining & Marketing Company LLC, an indirect, wholly owned subsidiary of Marathon Petroleum Corporation ("Marathon")



Applied for a Land Use Permit on September 16, 2020

Review Timeline



Notice of Preparation

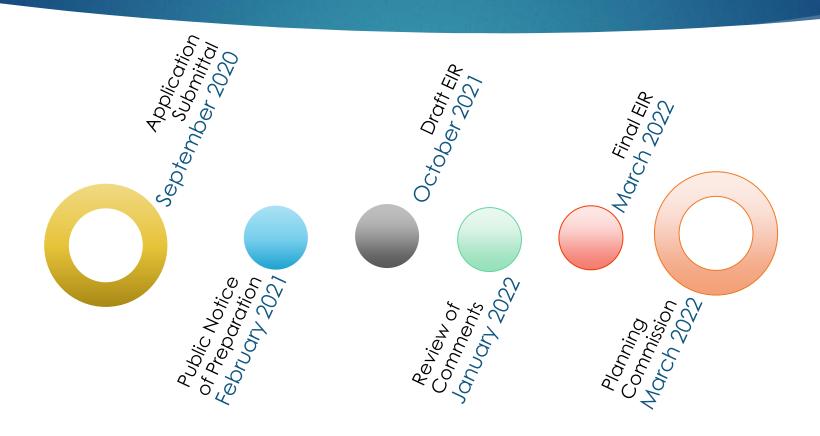




The County Sent a CEQA Notice of Preparation of an Environmental Impact Report on February 17, 2021.

The County held a Public Scoping Meeting on March 15, 2021.

Review Timeline



Draft Environmental Impact Report

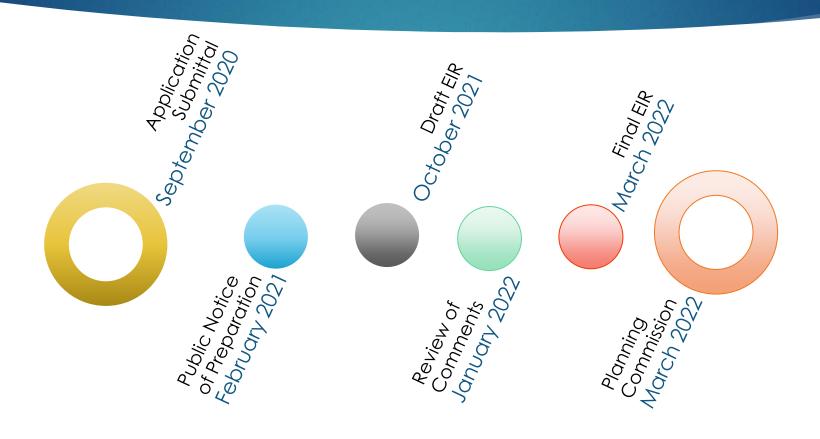


Preparation of the DEIR from February through October 2021 (9 Months)



Draft EIR was Released on October 18, 2021 For a 60-Day Public Review

Review Timeline

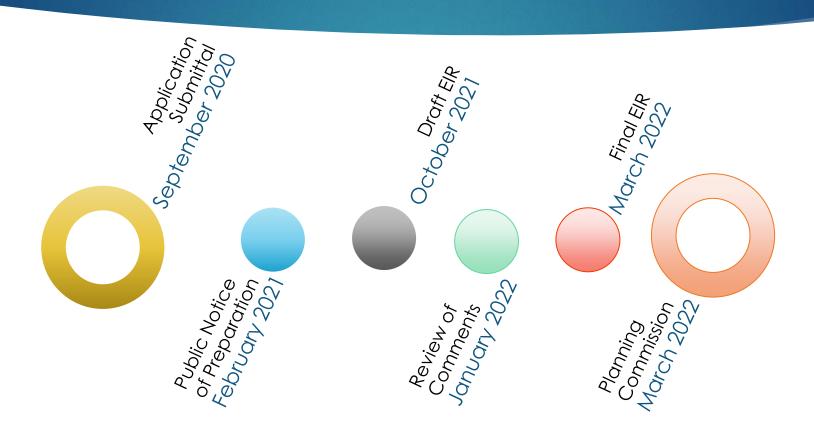


Comment Review for FEIR



From December 2021 to March 2022 Individual Comments Were Reviewed and Responded To

Review Timeline



Final EIR and Planning Commission



The Final EIR, including the response to all comments, is now completed and presented to the Planning Commission for Certificiation

Project Overview

Project Site

Location

150 Solano Way, Pacheco, CA

Site

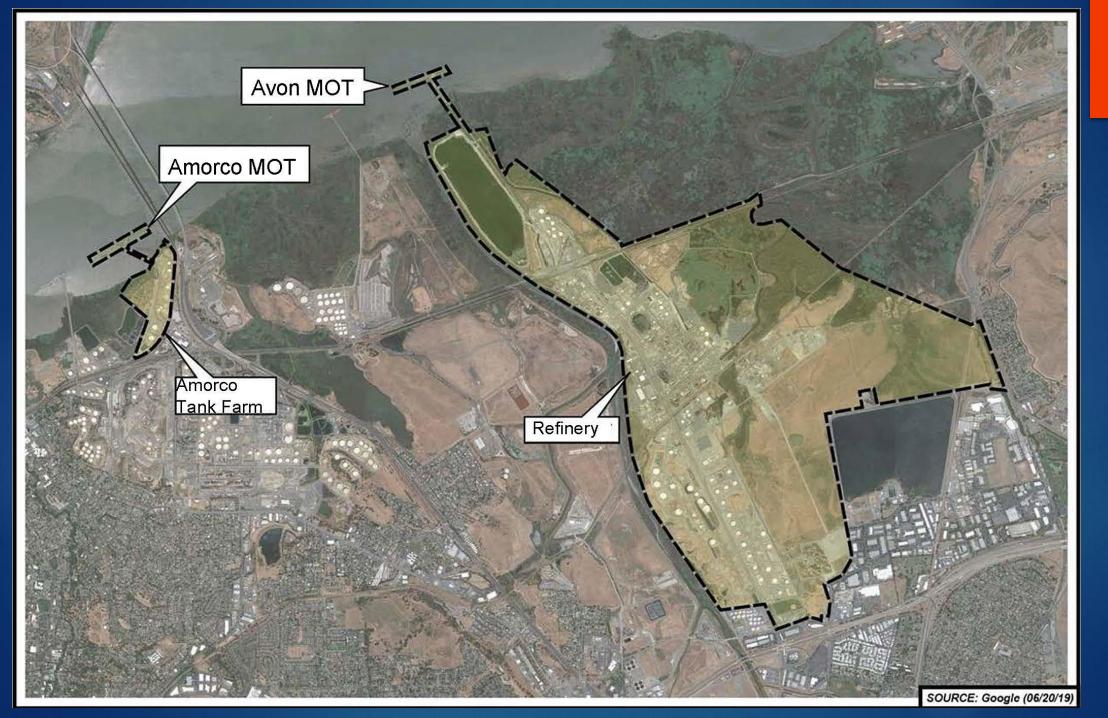
2,000-acre site

1,130 Acres Developed Refining Operations
870 Acres Undeveloped Marshlands and Grasslands

General Plan and Zoning

Heavy Industry (HI), Water (WA), and Open Space (OS)

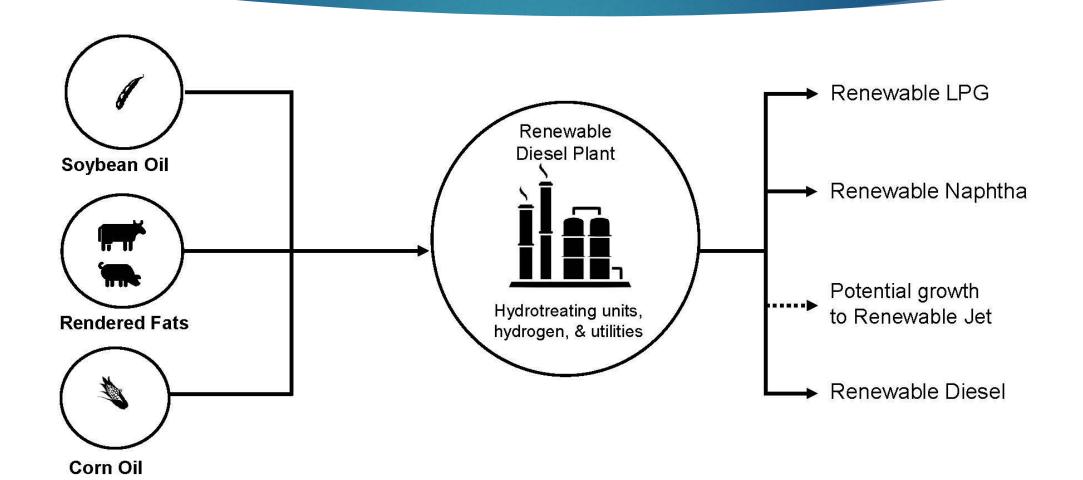
Heavy Industrial District (H-I), Light Industrial District (L-I), and Railroad Corridor (-X) Combining District



Martinez Refinery Renewable Fuels Project

Modifications and repurposing of the existing refinery facility to production of fuels from renewable sources including rendered fats, soybean and corn oil and other cooking or vegetable oils.

Martinez Refinery Renewable Fuels Project



Avon Marine Terminal

- Pipes and Hoses Reconfigured to Separate Petroleum and Renewable feedstocks
- Pipelines heated and insulated to transmit renewable feedstock

Amorco Marine Terminal

- Modified Fender to Allow Smaller Vessels
- Maintenance and Repairs to Concrete and Five Pilings
- Changed from Receiving to Distributing

Pipelines

- Added Insulation Heat Tracing to Ensure Product Stays Fluid

Utilities

- New Pretreatment Unit and Stage 1 Wastewater Treatment Unit

Phase 1 Refining Unit Modifications

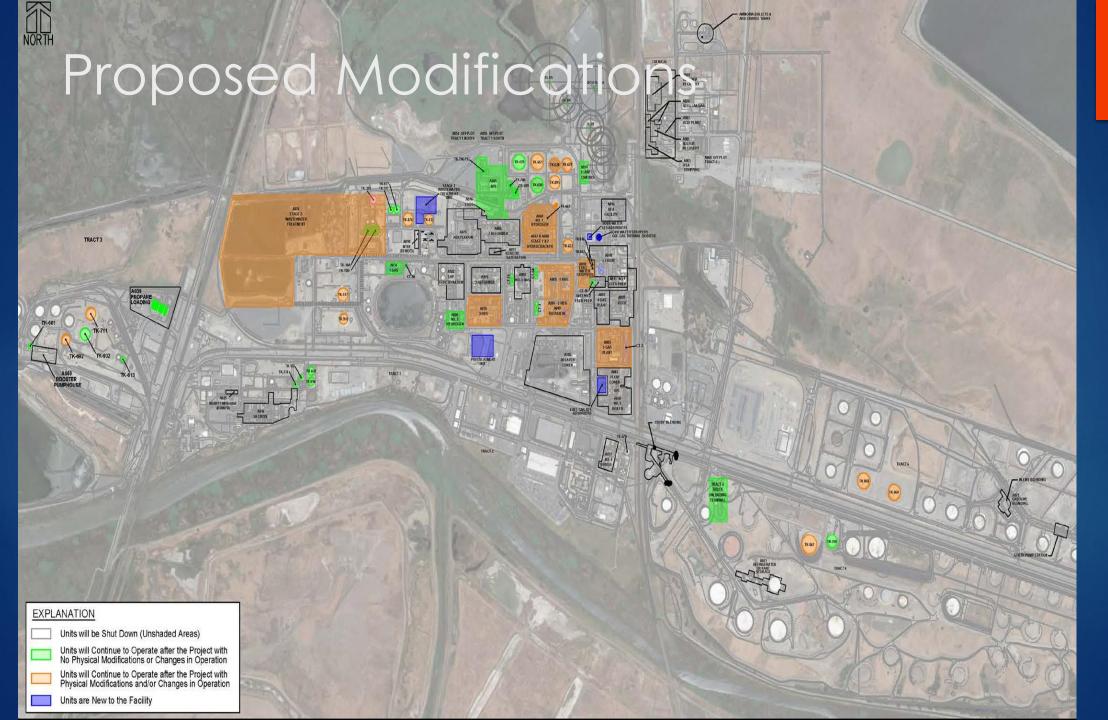
- No. 3 Hydrodesulfurization Unit Revamp
- Hydrocracker 2nd Stage Unit Revamp
- No. 5 Gas Plant Revamp

Refining Unit Modifications Cont.

- New Thermal Oxidizer for Sour Water Stripper
- Hydrocracker 1st Stage Unit
- No. 2 Hydrodesulfurization Unit

Tanks

- Up to 29 Tanks Repurposed for Project
- 15 of the 29 Tanks Upgraded for Renewable Feedstocks



Project Operations

Feedstock Throughput

- Previously 161,000 bpd Petroleum Feedstocks
- 23,000 bpd Renewable Feedstocks (Phase 1)
- 48,000 bpd Renewable Feedstocks (Phase 2)

Project Operations

Transportation by Truck, Rail, Vessel and Pipeline

Pre-Project Post-Project

Truck: 205 Daily → 180 Daily

Railcars: 13 Daily → 63 Daily

Vessels: 3 Weekly → 7 Weekly

Project Operations

Emissions Reductions

		NOx	SO2	СО	POC	PM10	PM _{2.5}
Baseline	All Sources	822.78	713.37	717.1	219.38	296.29	267.7
Daily Post Project	All Sources	283.31	61.48	118.46	127.48	49.6	46.61
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Differential	All Sources	-539.47	-651.89	-598.64	-91.9	-246.69	-221.09
	% reduction	66%	91%	83%	42%	83%	83%

Project Context

Low Carbon Fuel Standard (LCFS)

The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes.

Project Context

CARB is currently receiving public input on potential amendments to the LCFS.

2022 Scoping Plan update will evaluate how to achieve carbon neutrality by mid-century and the types and role of low carbon fuels needed in the future.

Future rulemaking could potentially take effect in 2024 upon approval of the 2022 Scoping Plan Update in late 2022.

Environmental Impact Report

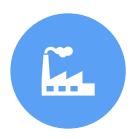
CEQA Environmental Impact Report



CEQA OVERVIEW



PROJECT DESCRIPTION



PROJECT BASELINE



IMPACTS



ALTERNATIVES

California Environmental Quality Act Overview

Preparation of an EIR:

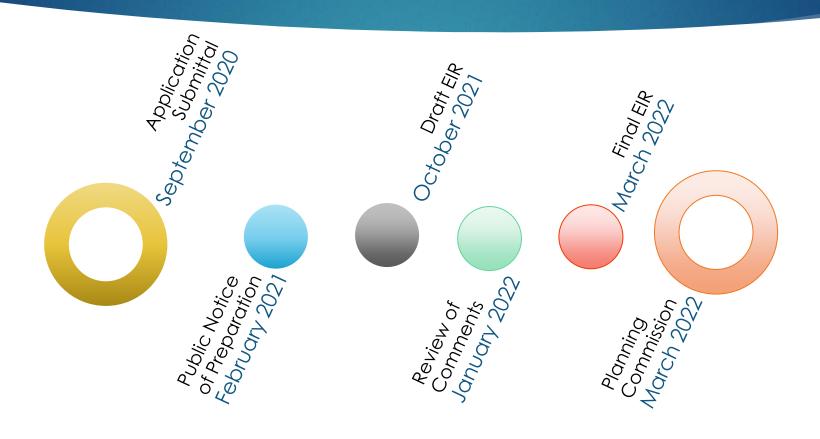
Scoping – Solicitation of Agencies and Interested Parties

Draft EIR - Project Description, Impact Analysis, Alternatives

Comments – 60-day Comment Period for Public Review of DEIR

FEIR – Response to Comments and Necessary Revisions

Review Timeline



Project Description – Project Objectives

Marathon Identified 6 Project Objectives

1. Repurpose the Marathon Martinez Refinery to a renewable fuels production facility.

2. Eliminate the refining of crude oil at the Martinez Refinery while creating high quality jobs.

3. Provide renewable fuels to allow California to achieve significant progress towards meeting its renewable energy goals.

4. Produce renewable fuels that significantly reduce the lifecycle generation of greenhouse gas emissions, as well as other criteria pollutants including particulate matter.

5. Reduce emissions from mobile sources by providing cleaner burning fuels.

6. Repurpose/reuse existing critical infrastructure, to the extent feasible.

Baseline

"An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives. The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts"

Baseline

5-year Period for Baseline presents the variation in production at the Refinery (2016 to 2020). Captures turnaround schedule and market fluctuations.

Baseline is used for comparison in Environmental Impacts Analysis.

Primary factors for baseline selection were representativeness and conservativeness.

Baseline

Table 3-4 Comparative Vehicle and Vessel Traffic for Marathon Refinery, 1-year, 3-year Average, and 5-year Average

Vessel or Vehicle	Units	1-year (2019-2020)	1-year (2018-2019)	3-year Average (2017-2020)	5-year Average (2015-2020)
Truck	Miles Traveled	2,837,991	4,559,507	3,972,015	4,146,210
Train	Miles Traveled	2,380	4,820	4,154	4,605
Vessel	Calls	124	161	150	143

Source: Marathon Petroleum Corporation, 2021

Environmental Impacts Analysis

Impact Summary – Mitigated Significant Impacts

Construction-related Air Emissions

Odor

Marine and Avian Biological Resources (non-spill related)

Cultural resources

Seismicity

Hazards

Tribal Cultural Resources

Environmental Impacts Analysis

Impact Summary –Significant and Unavoidable Impacts

Air Quality

Biological Resources

Hazards and Hazardous Materials

Water Quality

"No Project" Alternative

Compare the impacts of approving the proposed project with the impacts of not approving the proposed project.

Under the No Project scenario, the proposed Renewable Fuels Project would not proceed. Instead, Refinery operations would resume.

Reduced Renewable Feedstock Throughput Alternative

Conversion of the Refinery from a crude oil processing facility to a facility for the refining of renewable feedstock at a reduced capacity of 23,000 bpd maximum.

Green Hydrogen Alternative

"Green" hydrogen would be used in the renewable fuels refining process instead of steam methane reforming technology.

Environmentally Superior Alternative

The Reduced Renewable Feedstock Throughput Alternative would not result in any impacts that would be greater than the proposed Project, and in many cases would result in reduced impacts.

However, would generate fewer jobs and result in a lower volume of renewable fuels to support the State's low-carbon fuel goals, and would not achieve Project objectives as well as the proposed Project.

Staff Recommendation

To Address Comments Received Regarding Air Districts Regulation 6, Rule 6, Staff Recommends the Commission Modify COA #11(MM AQ-1a) as Follows:

The following Bay Area Air Quality Management District, Basic Construction mitigation measures and Additional Best Practices shall be implemented during project construction and shall be included on all construction plans:

The permittee shall implement the following Basic Construction Mitigation Measures during construction of the Project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand or other loose material off-site shall be covered.
- The permittee shall not cause or allow track-out at any active exit from the site onto an adjacent paved public roadway or shoulder of a paved public roadway that exceeds cumulative 25 linear feet and creates fugitive dust visible emissions. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers within 4 hours of when the owner/operator identifies such excessive track-outat least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- Monitor the extent of the trackout at each active exit from the site onto a paved public road at least twice during each workday, at times when vehicle traffic exiting the site is most likely to create an accumulation of trackout, or as otherwise specified by the Air District.
- Document the active exit locations monitored each workday.
- Document each occasion when the trackout exceeds cumulative 25 linear feet and all trackout control and cleanup actions initiated as a result of the above monitoring.
- Maintain these records for at least five years, in electronic, paper hard copy or log book format, and make them available to the Air District upon request.

To Address Comments Received Regarding the Odor Management Plan, Modify COA #13 (MM AQ-1b) as Follows:

During the construction phase of the Project, the operational Odor Management Plan (OMP) shall be developed and implemented upon commissioning of the renewable fuels processes, intended to become an integrated part of daily operations at the Facility and other sites, so as to prevent any objectionable offsite odors and effect diligent identification and remediation of any potential objectionable odors generated by the facility and associated sites. The plan shall outline equipment that is in place and procedures that facility personnel shall use to address odor issues, facility wide. The OMP shall include continuous evaluation of the overall system performance, identification of trends to provide an opportunity for improvements to the plan, and updating the odor management and control strategies, as necessary. This plan shall be retained at the facility for County or other government agency inspection upon request. The following practices shall be included in the OMP to reduce the potential of objectionable odors from the storage of renewable feedstocks, operation of the wastewater treatment plant, and any other odor generating activity:

- Develop operating procedures to inspect and evaluate the effectiveness of odor control equipment and operation of the wastewater treatment plant.
- Inspections to be conducted on a semi-annual basis.
- If there are fewer than an average of five confirmed complaints per year during the first 3 years of operation, then the inspection frequency can be reduced to an annual basis.
- If there are more than five confirmed complaints in any single year, then the application shall develop additional mitigation strategies in consultation with the BAAQMD.
- In the event that odor complaints are reported, the permittee shall immediately take action to prevent repeat complaints. The permittee shall also develop and implement remedial odor mitigation strategies in consultation with the BAAQMD and County.

Prepare an annual evaluation report of the overall system performance, identifying any trends to provide an opportunity for improvements to the plan, and updates to the odor management and control strategies, as necessary. The report shall be provided to the BAAQMD and County for review and approval.

- OPEN the public hearing on the Martinez Refinery Renewable Fuels Project, RECEIVE testimony, and CLOSE the public hearing.
- 2. CERTIFY that the Environmental Impact Report (EIR) for the Martinez Refinery Renewable Fuels Project (State Clearinghouse #2021020289) was completed in compliance with the California Environmental Quality Act (CEQA), was reviewed and considered by the County Planning Commission before project approval, and reflects the County's independent judgment and analysis.
- 3. CERTIFY the EIR prepared for the Martinez Refinery Renewable Fuels Project.
- 4. ADOPT the CEQA findings for the Project.
- MODIFY and ADOPT the Mitigation Monitoring and Reporting Program for the Project.
- 6. ADOPT the statement of overriding considerations for the Project.
- 7. DIRECT the Department of Conservation and Development to file a CEQA Notice of Determination with the County Clerk.
- 8. SPECIFY that the Department of Conservation and Development, located at 30 Muir Road, Martinez, CA, is the custodian of the documents and other material which constitute the record of proceedings upon which the decision of the County Planning Commission is based.
- 9. APPROVE the Martinez Refinery Renewable Fuels Project.
- 10. APPROVE the findings in support of the Project.
- 11. ACCEPT and APPROVE the Modified Project conditions of approval.

Richard Corey, Executive Officer, CARB



More on the LCFS



Questions?